

CLAIMS

What is claimed is:

1. A Voice-over-Internet Protocol (VoIP) system, comprising:
a network including at least two VoIP proxy servers configured to allow voice data to be transmitted and received over the network;
at least one VoIP client operatively coupled to the network to transmit and receive voice data over the network; and
a load monitor device configured to monitor workload on the at least two VoIP proxy servers and determine an identity of the VoIP proxy server with a lowest workload, and to provide the identity of the VoIP proxy server with the lowest workload to the at least one VoIP client so that the at least one VoIP client can connect to the VoIP proxy server with the lowest workload to transmit and receive voice data.
2. The VoIP system according to claim 1, wherein the at least one VoIP client is at least two VoIP clients operatively coupled to the network to transmit and receive voice data over the network; and wherein the load monitor device provides the identity of the VoIP proxy server with the lowest workload to one of the at least two VoIP clients so that the one of the at least two VoIP clients can connect to the VoIP proxy server with the lowest workload in order to transmit and receive voice data in relation to another of the at least two VoIP clients.
3. The VoIP system according to claim 1, wherein the network comprises one or more of a proprietary network, a network of leased facilities, the Internet, an Intranet, a wide-area network (WAN), a local-area network (LAN) and a virtual private network (VPN).
4. The VoIP system according to claim 1, wherein the load monitor device provides the identity of the VoIP proxy server with the lowest workload

to the at least one VoIP client in response to a client query from the at least one VoIP client.

5. The VoIP system according to claim 1, further including the at least one VoIP client coupled to a gateway coupled to the network wherein the gateway controls access to the network.

6. The VoIP system according to claim 5, wherein the gateway comprises one or more of a VoIP gateway, a VoIP PTSN gateway, a media gateway, a router and an H.323 gateway.

7. The VoIP system according to claim 1, wherein the at least one VoIP client comprises one or more of an IP phone, a plain old telephone system (POTS) phone, a cell phone, a satellite phone, a microphone, a computer video camera with a microphone and a multi-media computer configured to transmit and receive voice data.

8. The VoIP system according to claim 1, wherein the load monitor device periodically polls the at least two VoIP proxy servers for workload data.

9. The VoIP system according to claim 1, wherein the at least two VoIP proxy servers spontaneously report workload data to the load monitor device.

10. The VoIP system according to claim 1, wherein the load monitor device is programmed to collect workload data from the at least two VoIP proxy servers.

11. The VoIP system according to claim 1, wherein the load monitor device is programmed to continuously collect workload data from the at least two VoIP proxy servers.

12. The VoIP system according to claim 1, wherein the load monitor device is programmed to collect workload data from the at least two VoIP proxy servers upon receipt of a client query from the at least one VoIP client.

13. The VoIP system according to claim 1, wherein the at least one VoIP client connects to the VoIP proxy server with the lowest workload to transmit and receive video data.

14. A method for connecting at least one Voice-over-Internet Protocol (VoIP) client to a VoIP system, wherein the VoIP system comprises a network of at least two VoIP proxy servers, a load monitor device and a VoIP proxy server has a lowest workload; comprising the steps of:

- (a) monitoring the at least two VoIP proxy servers for an indication of workload;
- (b) identifying which VoIP proxy server has the lowest workload; and
- (c) connecting of the at least one VoIP client to the VoIP proxy server with the lowest workload in order to transmit and receive voice data.

15. The method of claim 14, wherein the VoIP system includes at least two VoIP clients, and further includes the step of connecting of one of the at least two VoIP clients to the VoIP proxy server with the lowest workload in order to transmit and receive voice data in relation to another of the at least two VoIP clients.

16. The method of claim 14, further including the step of providing an identity of the VoIP proxy server with the lowest workload to the at least one VoIP client.

17. The method of claim 14, further including the step of receiving a client query by a load monitor device from the at least one VoIP client to identify the VoIP proxy server with the lowest workload.

18. The method of claim 14, further including the step of polling periodically by a load monitor device the at least two VoIP proxy servers for workload data.

19. The method of claim 14, further including the step of receiving spontaneous reports on workload data by a load monitor device from the at least two VoIP proxy servers.

20. The method of claim 14, further including the step of collecting continuously workload data by a load monitor device from the at least two VoIP proxy servers.

21. The method of claim 14, further including the step of responding to a client query from the at least one VoIP client by a load monitor device with the identity of the VoIP proxy server with the lowest workload.

22. The method of claim 14, further including the step of transmitting and receiving voice and video data.